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SCS 1989b

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SCS ENGINEERS

ENTERED

PHASE II ENVIRONMENTAL
SITE ASSESSMENT
for the
PROPOSED MARRIOTT COURTYARD SITE
CLEVELAND, OHIO
MARRIOTT PROJECT NUMBER CA64

LAKE ABRAMS

Prepared for:

Marriott Corporation
One Marriott Drive
Department 934.04
Washington, D.C. 20058

Prepared by:

SCS Engineers
11260 Roger Bacon Drive
Reston, Virginia 22090
(703) 471-6150

July 13, 1989
File No. 288049.04

RECEIVED

AUG 16 1989

OHIO EPA-N.E.D.O.

SCS ENGINEERS

July 13, 1989
File No. 288049.04

Ms. Carolyn Bailey
Marriott Corporation
One Marriott Drive
Department 934.04
Washington, D.C. 20058

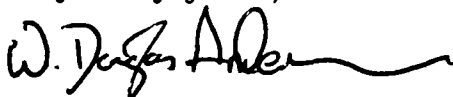
Subject: Phase II Environmental Site Assessment Report for the Proposed
Marriott Courtyard Site in Cleveland, Ohio. Marriott Project No.
CA64.

Dear Carolyn:

SCS Engineers is pleased to provide you with five copies of the enclosed Phase II Environmental Site Assessment Report for the proposed Marriott Courtyard site in Middleburg Heights, Cuyahoga County, Ohio.

We thank you for the opportunity to perform this assignment. If there are any questions regarding the information contained in these reports, please telephone either of the undersigned.

Very truly yours,



W. Douglas Anderson
Project Geologist

For Michael W. McLaughlin/dhc

Michael W. McLaughlin
Vice President
SCS ENGINEERS

WDA/MWM/dhc

Enclosures

PROJECT SCOPE AND LIMITATIONS

SCS Engineers was authorized by Ms. Carolyn Bailey of the Marriott Corporation to perform a Phase II Environmental Site Assessment for the proposed Marriott Courtyard site in Cleveland, Ohio. The purpose of this Phase II investigation was to perform a subsurface investigation and chemical analysis to identify the chemical characteristics of the fill material on site. The need to characterize onsite fill was identified in SCS' Phase I Environmental Site Assessment for the property dated May 24, 1989.

This Phase II Environmental Site Assessment is based on our proposal submitted to Marriott dated June 9, 1989 (File No. 288049.04). Major tasks included:

- Drilling three (3) soil borings with split spoon soil samples obtained at five foot intervals, with one boring converted to a groundwater monitoring well;
- Obtaining three composite soil and one water samples and analyzing for the following parameters:
 - Soils: EP Toxicity (As, Ba, Cd, Cr, Pb, Hg, Se, Ag); total metal analysis for the above listed metals as well as nickel, and analysis for cyanide generation;

- Water: for the same heavy metal parameters identified above and cyanide; and
- Review of U.S. Environmental Protection Agency's (EPA) Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) file on Lake Abrams Holding Pond (EPA ID# OH980510218).

This report is prepared exclusively for the use of the Marriott Corporation, with the care and skill generally exercised by reputable professionals under similar circumstances, in this or similar localities. No other warranty, either expressed or implied, is made as to the professional advice presented herein. Third parties may use this report at their own risk.

SITE HISTORY

Site Location

The proposed Marriott Courtyard site is located off Engle Road approximately one quarter mile north of Bagley Road in Middleburg Heights, Cleveland, Ohio. The site is bordered by the proposed "Engle Lake Road" to the west, a vacant parcel to the north, Interstate 71 to the east, and a holding pond to the south (Appendix I).

Current and Previous Owners of the Site

The site is presently owned by Engle Road Associates. The principle owners of Engle Road Associates are Mr. Bill West (216)861-7200 and Mr. Kenneth Sax (216)243-5500. Engle Road Associates obtained the property in April 1988. Engle Road Associates obtained 33 acres (which does not include the pond) from Motel Management. Engle Road Associates currently constructing buildings for business use on the western portion of their property. One building currently is leased to Federal Express and is open for business. Other buildings are currently under construction.

The contact person for Motel Management (previous owners of the 33 acre site) is Mike Gallucci. SCS contacted [Non-responsive] [Non-responsive] concerning the use of the property. Mr. Gallucci informed SCS that Motel Management changed their name to the Cornerstone Company last year. Mr. Gallucci said they purchased the property in 1985 with the intention of building a hotel.

Fraser Mortgage owned the 33 acres prior to Motel Management. SCS spoke with Mr. Bill Miller, principal of the company. Mr. Miller said that Fraser Mortgage owned the property for about 10 years. Fraser Mortgage did not build on the property, although at one time they thought of building a hotel. Mr. Miller indicated that he does not recall foundry sand on the property at the time the property was conveyed to Fraser by Mr. Rossbaugh. Mr. Miller recalls

excavation occurring at the site about 6 to 7 years ago (while the property was owned by Fraser) by Boyas Excavating.

SCS spoke with Mr. John Green of Boyas Excavating. Mr. Green informed SCS that Boyas had a 4 to 5 year contract with Ford Motor Company to fill in part of the pond located at the subject site. Mr. Green said the material they used for backfill was sludge from Ford's mill ponds. Mr. Green said the fill operation occurred approximately 7 years ago.

SCS contacted Kevin Bonzo the Ohio Environmental Protection Agency [(216)425-9171] concerning the lateral extent of the foundry sand in the area. Mr. Kevin Bonzo (RCRA Division) indicated that foundry sand is located over the majority of Middleburg Heights and parts of Brookpark. Mr. Bonzo is unaware of how many acres and how many land owners are involved with the extent of the foundry sand. Mr. Bonzo said that he has been working with Ford Motor Company (a RCRA facility) for several years. Mr. Bonzo provided SCS with the name of Ford Motor Company's contact, Mr. Ron Jud (216)676-7145.

SCS requested Mr. Jud to provide an estimate of the amount of foundry sand that was distributed over the Middleburg Heights and Brookpark areas and where it was deposited. Mr. Jud informed SCS that our request was extensive. To obtain this information, Mr. Jud said that SCS would need to present a written request. Pending further discussion with Marriott, SCS Engineers has not presented such a written request.

In addition, a copy of the Environmental Protection Agency (EPA) preliminary assessment report for this site obtained later by SCS, indicated that in addition to foundry sand, "waste oil" had also been disposed of at this location. A copy of this report is attached as Appendix IV.

SUBSURFACE INVESTIGATION

The purpose of the field investigation was to obtain representative soil samples of the foundry sand and have the soils tested to see if they exhibit characteristics of hazardous wastes, or are otherwise contaminated. On June 15 and 16, 1989 Pennsylvania Drilling Company drilled three (3) soil borings and converted one to a groundwater monitoring well. All drilling and well installation was done under the direction of an SCS field geologist. The drilling was performed using the hollow stem auger method. Soil samples were obtained at 5-foot intervals using the split barrel sampling method. Standard decontamination procedures were used on all down hole drilling equipment in between boring locations. All soil samples were visually identified and described in the field by the onsite geologist. Complete soil boring logs are enclosed as Appendix II.

Soil Boring and Well Location

The locations selected for the soil borings and well were based on the information that was obtained during the Phase I Site Reconnaissance, and to

reflect a representative geographical coverage of the property. Test Boring and Monitoring Well Number 1 (TB-1/MW-2) was located in the west-central portion of the site in order to obtain a water sample that would be most representative of the overall site based on estimated groundwater flow directions. TB-2 was drilled near the southeastern corner of the property, near the holding pond. TB-3 was drilled near the northeastern corner of the property, near the woods and drainage ditch. All boring locations are shown on Appendix II.

All borings were drilled until natural undisturbed soils or bedrock underlying the foundry sand was encountered. TB-1/MW-1 was drilled to a total depth of 30.8 feet below existing land surface. A 30-foot water monitoring well was installed in this boring. The well was constructed of 2-inch PVC well screen and riser pipe. The screen portion of the well consisted of 10 feet of .010 slotted well screen surrounded by a suitable sand pack. A 3-foot bentonite seal was placed above the sand approximately 5 feet above the screen. The remaining annular space was filled with a cement/bentonite grout. A steel protective cap was installed over the PVC wellhead cap and locked.

Soil Samples

Each soil sample was placed in a glass 500 ml jar supplied by the laboratory, sealed, and labeled. Each sample was then placed on ice and transported to SCS' analytical testing laboratory. At the laboratory, each sample was

composited with the other samples from the same boring to form one single sample for testing. One composite soil sample from each boring was analyzed.

Groundwater Samples

The groundwater sampling was performed on June 16, 1989. Once the well (MW-1/TB-1) was fully developed, the well was purged by bailing the well with a stainless steel bailer until 3 well volumes (13 gallons) were removed from the well. The water sample was field filtered using a .045 micron filter to remove suspended particles and sediment. The water sample was then placed in an 800 ml plastic sample bottle with nitric acid as a preservative, labeled, and placed on ice for transport to the laboratory for analysis.

SAMPLE ANALYSIS

The analyses that were performed on the soil and water samples were as follows:

- Method 1310 - EP Toxicity (As, Ba, Cd, Cr, Pb, Hg, Se, Ag);
- Total metal analysis for the above listed metals plus nickel;
- Cyanide generation;

- Method 8010 - Halogenated Volatile Organics and 8020 - Aromatic Volatile Organics - for the soil sample having the odor of fuel; and
- Method 601 - Halogenated Volatile Organics and 602 - Aromatic Volatile Organics - for the water sample.

The 8020 method (soil samples) was used to determine the concentration of various volatile halogenated organic compounds. During the drilling of TB-3, a petroleum odor was noticed in two samples. This prompted SCS to run the VOA analysis of these samples. Two samples from TB-3 (S-4 and S-5), were composited to form a single sample.

ANALYTICAL RESULTS

The test results for the soil samples indicated elevated levels of Lead and Cadmium. However, none of the samples failed the EP toxicity test; the samples tested would not be considered hazardous waste. The following tabulation shows the range of contaminants found in the foundry sand at the site. Complete results are shown in Appendix III.

Concentration in mg/kg

<u>Parameter</u>	<u>TB-1</u>	<u>TB-2</u>	<u>TB-3</u>	<u>Common Range</u>	<u>Average</u>
Arsenic	3.5	3.3	2.1	1 - 500	5
Barium	69.5	86.4	68.6	100 - 3,000	430
Cadmium	14.4	30.6	34.9	0.01 - 0.7	0.06
Chromium	40.7	70.6	64.4	1 - 1,000	100
Lead	761	1,270.0	1,480.0	2 - 200	10
Mercury	ND	ND	ND	0.01 - 0.3	0.3
Selenium	0.21	ND	ND	0.1 - 2	0.3
Silver	2.5	5.0	6.2	0.01 - 5	0.05
Nickel	45.7	31.0	30.1	5 - 500	40
Cyanide	0.5	1.5	1.1		
Benzene	NS	NS	0.065		
Ethylbenzene	NS	NS	0.013		
Toluene	NS	NS	0.064		
Xylene	NS	NS	0.081		

ND - Not Detected

NS - Not Sampled

The groundwater sample contained detectable amounts of arsenic (0.041 mg/liter), lead (0.062 mg/liter) and cyanide (0.26 mg/liter). The concentration of lead found exceeds the Ohio and U.S. Environmental Protection Agency drinking water standard of 0.050 mg/liter; the standard for arsenic is 0.050 mg/liter and there is no current standard for cyanide.

CONCLUSIONS

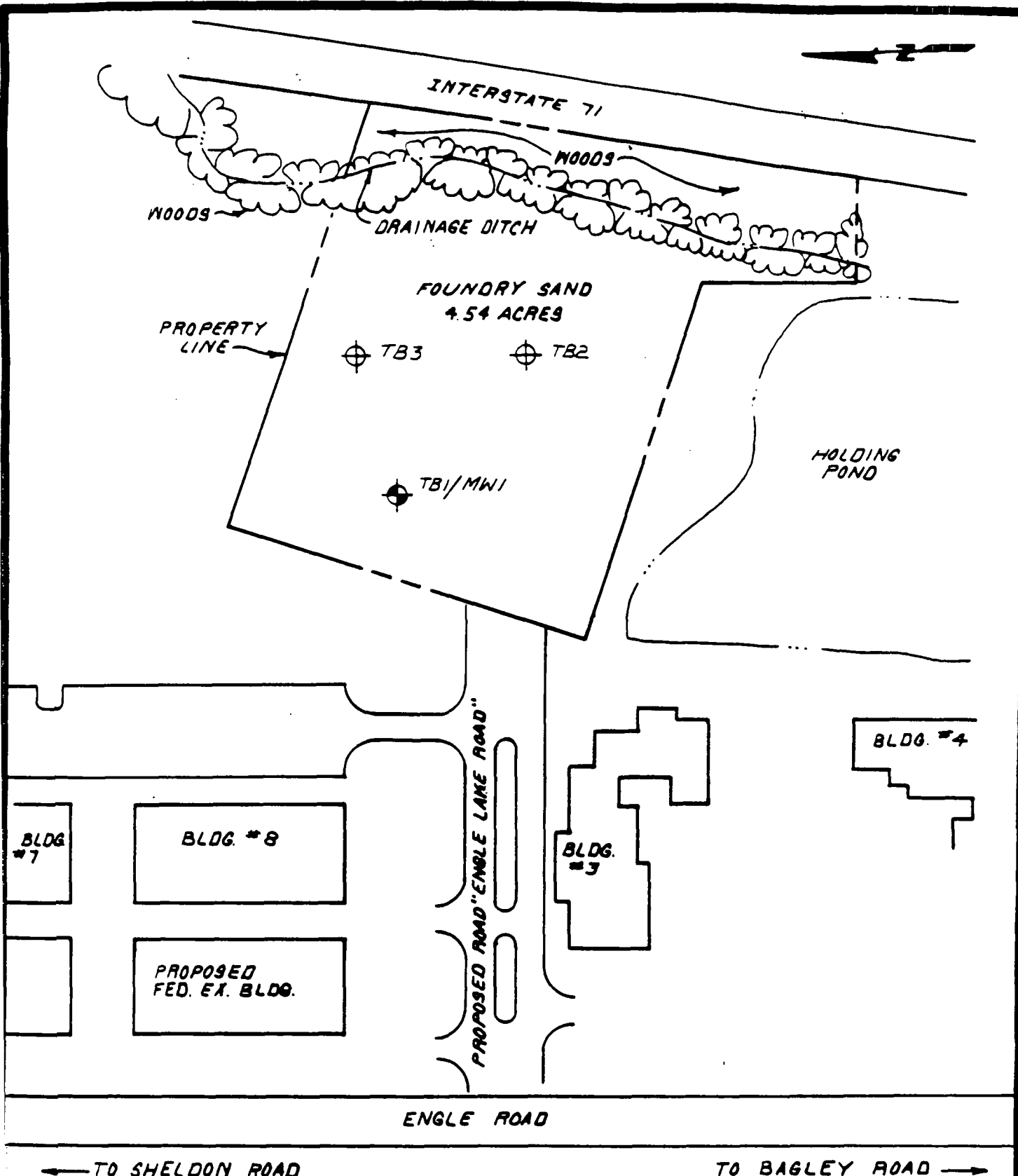
Based upon the results of soil sampling and analysis, the "foundry sand" fill material at the site is not a hazardous waste. However, the fill material does contain high concentrations of lead and cadmium as compared with natural background concentrations. Lead concentrations exceed the 500 mg/kg guideline

used by some states and U.S. EPA as a safe level for unrestricted site use. Two of the three samples exceed 1,000 mg/kg lead (a level proposed in the past by SCS as an action level for industrial sites).

In addition, one of the soil samples was contaminated with gasoline constituents (benzene, toluene, ethylbenzene, and xylene).

The single groundwater sample analyzed contained elevated levels of arsenic, lead, and cyanide. The lead concentration exceed drinking water standards, often used by regulatory agencies as groundwater standards.

However, it does not appear that groundwater is used as a source of drinking water near the site. SCS contacted the Cuyahoga County Division of Water (216)664-3323 regarding the location of municipal water supply intakes near the subject property. SCS spoke with Mr. Allan Greenburg, Environmental Compliance officer, who said that the nearest water intakes are located about 4 to 5 miles out in Lake Erie. Mr. Greenburg indicated that the municipal water covers most of the Cleveland area with the exception of a few residences in Parma Heights which receive their water via groundwater.



NOTE: NOT TO SCALE

Appendix I--Site Plan
 Prepared For: Marriott Corporation
 Project No.: 288049.04
 Date: July 7, 1989



SCS ENGINEERS

STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
11260 ROGER BACON DRIVE
RESTON, VIRGINIA 22090
(703) 471-6190

GEOLOGIC LOG

PROJECT MARRIOTT Cleveland Airport #288049.04
CLIENT MARRIOTT Corporation
BORING CONTRACTOR Pennsylvania Drilling Co.

BORING NO. TB1 / MW1

SHEET NO. 1 OF 2

ELEVATION _____

DATUM GL

DATE START 6-15-89

DATE FINISH 6-15-89

INSPECTOR D. ANDERSON / J. HENDRICKS

DRILLER Brion

	CAS.	SAMP.	CORE	GROUND WATER			
TYPE		SS		DATE	TIME	DEPTH	MP
DIA.		8"		6/15/89	1600	26.0'	GL
WT.		140 lb					
FALL		30"					

DEPTH FEET	CASING BLOWS	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	SYMBOL	IDENTIFICATION	REMARKS	
1					VERY LOOSE FINE-MEDIUM dark gray SAND, little silt, trace clay, Moist.		
2							
3							
4							
5		1	1	SS			
6			WOH				
7							
8							
9							
10		2	16	SS	DENSE FINE DARK GRAY/white SAND, little silt, little sandstone fragments, moist.		
11			22				
12			24				
13					LOOSE FINE dark gray SAND, little silt, WET.		
14							
15		3	1	SS			
16			2				
17			6				
18							



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(703) 471-6150

GEOLOGIC LOG

PROJECT MARRIOTT Cleveland Airport
CLIENT MARRIOTT Corporation

BORING NO. TDA / MW1
SHEET NO. 2 OF 2

DEPTH FEET	CASING BLOWS	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	SYMBOL	IDENTIFICATION	REMARKS
20		4	16	SS	Same, DENSE.	
21			22			
			17			
22					Very dense Fine - medium dark gray - black SAND, WET.	
23						
24						
25			21			
26			30			
			36	SS	Same.	
27						
28						
29						
30			1			
		6	2	SS	Gray Sandstone	
31			50/3			
32						
33					EOB @ 30.8'	
34						
35						
36						
37						
38						
39						
40						
41						

NOTE:

WOH = Weight of hammer
WOR = Weight of Rod
EOB = End of boring
NR = No Recovery



SCS ENGINEERS

STEARNES, CONRAD AND SCHMIDT
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GEOLOGIC LOG

PROJECT MARRIOTT CLEVELAND AIRPORT
CLIENT MARRIOTT CORPORATION
BORING CONTRACTOR Pennsylvania Drilling CO.

BORING NO. TB2
SHEET NO. 1 OF 2
ELEVATION _____
DATUM GL
DATE START 6-15-89
DATE FINISH 6-15-89
INSPECTOR D. ANDERSON / J. HENDRICKS
DRILLER Brign

	CAS.	SAMP.	CORE	GROUND WATER			
TYPE		SS		DATE	TIME	DEPTH	MP
DIA.		8"		6/15/89	1830		GL
WT.		140g					
FALL		30"					

DEPTH FEET	CASING BLOWS	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	SYMBOL	IDENTIFICATION	REMARKS
1					TOP SOIL	
2						
3						
4						
5			4			
6		1	6	SS		
7			4			
8						
9						
10						
11		2	WOR	SS		
12			0			
13			0			
14						
15						
16		3	1			
17			1	SS		
18			WOR			
19						



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GEOLOGIC LOG

PROJECT MARriott Cleveland Airport
CLIENT MARriott CORPORATION

BORING NO. TB2
SHEET NO. 2 OF 2

DEPTH FEET	CASING BLOWS	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	SYMBOL	IDENTIFICATION	REMARKS
20		4	WOR	SS	Same.	
21						
22						
23						
24		5			Same.	
25			WOR	SS		
26						
27						
28		6			NR	
29						
30			WOR	SS		
31						
32					Gray Sandstone EOB @33.5'	
33						
34						
35						
36						
37						
38						
39						
40						
41						

Note:

WOH = Weight of Hammer
WOR = Weight of Rod
EOB = End of boring
NR = No Recovery



SCS ENGINEERS

STEARNES, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.
11260 ROGER BACON DRIVE
RESTON, VIRGINIA 22090
(703) 471-6150

GEOLOGIC LOG

PROJECT MARRIOTT CLEVELAND AIRPORT

CLIENT MARRIOTT CORPORATION

BORING CONTRACTOR Pennsylvania Drilling CO

BORING NO. TB-3

SHEET NO. 1 OF 2

ELEVATION _____

DATUM GL

DATE START 6-16-89

DATE FINISH 6-16-89

INSPECTOR D. ANDERSON / J. Hendricks

DRILLER _____

	CAS.	SAMP.	CORE	GROUND WATER			
TYPE		SS		DATE	TIME	DEPTH	MP
DIA.		8"					
WT.		190 ₄					
FALL		30"					

DEPTH FEET	CASING BLOWS	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	SYMBOL	IDENTIFICATION	REMARKS
1					Very loose Fine Dark gray - Black SAND, some silt, Little clay, Moist.	
2						
3						
4						
5						
6		1	1 0 1		Same.	
7						
8						
9						
10						
11		2	WOR		Same.	
12						
13						
14						
15						
16		3	WOR		Same.	
17						
18						
19						



SCS ENGINEERS

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RESTON, VIRGINIA 22090
(703) 471-6150

GEOLOGIC LOG

PROJECT MARRIOTT CLEVELAND AIRPORT
CLIENT MARRIOTT CORPORATION

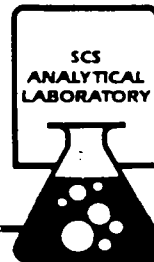
BORING NO. JB-3
SHEET NO. 2 OF 2

DEPTH FEET	CASING BLOWS	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	SYMBOL	IDENTIFICATION	REMARKS
20						
21		4	WOR	SS	Same.	Observed hydrocarbon ODORS and slight Sheen in samples 4 and 5
22						
23						
24						
25						
26		5	WOR	SS	Same	
27						
28						
29						
30						
31		6	WOR SS	SS	NR	
32						
33					Gray Sandstone	
34					EOB @ 31.5'	
35						
36						
37						
38						
39						
40						
41						

Note:

WOH = Weight of Hammer
WOR = Weight of Rod
EOB = End of Boring
NR = No Recovery

APPENDIX III
ANALYTICAL RESULTS



2860 WALNUT AVENUE
LONG BEACH, CALIFORNIA 90804
(213) 595-9324
FAX: (213) 595-6709

MEMO

To: Doug Anderson

From: Curtis B. Jenkins

June 30, 1989

Job No.: 0288049.04

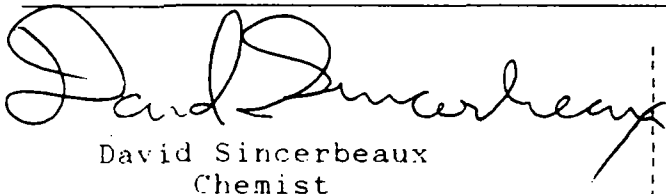
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LABORATORY REPORT

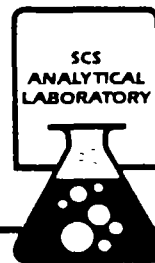
Samples: Seventeen (17) samples; two (2) waters and fifteen (15) soil samples from Marriott Cleveland Airport, received 6/17/89, analyzed 6/30/89.

Sample ID	CN-
	(335.2)
	--mg/kg--
Composite CS-1	0.50
Composite CS-2	1.5
Copmosite CS-3	1.1
	--mg/L--
TB1/MW1 & WS-1	0.26

Metals, EPA 8010 & EPA 8020 - see attached sheets


David Sincerbeaux
Chemist


Ken LaConde
Laboratory Director



2860 WALNUT AVENUE
LONG BEACH, CALIFORNIA 90806
213/ 595-9324
FAX (213) 595-6709

Addendum Report, RCRA Metals
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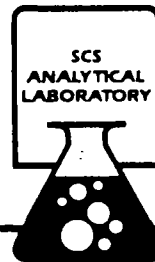
Sample I.D.: Composite CS-1
Date Received: 6/17/89
Date Analyzed: 6/30/89
Matrix: Soil
Project: 0288049.04
File #: mariot1.rep

Compound	EPA Number	EP TOX	
		Result	D.L
		-----mg/kg	(ppm)-----
Arsenic	7060	0.04	0.02
Barium	7080	ND	0.5
Cadmium	7130	ND	0.1
Chromium	7160	ND	0.3
Lead	7420	ND	1
Mercury	7471	ND	0.05
Selenium	7740	ND	0.02
Silver	7760	ND	0.2
Nickel	7520	ND	0.6

Compound	EPA Number	TTLC	
		Result	D.L
		-----mg/kg (ppm)-----	
Arsenic	7060	3.5	2
Barium	7080	69.5	1
Cadmium	7130	14.2	1
Chromium	7160	40.7	3
Lead	7420	761	7
Mercury	7471	ND	0.009
Selenium	7740	0.21	0.2
Silver	7760	2.5	2
Nickel	7520	45.7	6

ND - Not Detected
D.L. Detection Limit

ND - Not Detected
D.L. Detection Limit



2860 WALNUT AVENUE
LONG BEACH, CALIFORNIA 90805
(213) 595-9324
FAX (213) 595-5709

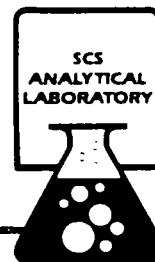
Addendum Report, RCRA Metals
Page 3 of 7

Sample I.D.: Composite CS-2
Date Received: 6/17/89
Date Analyzed: 6/30/89
Matrix: Soil
Project: 0288049.04
File #: mariot1.rep

Compound	EPA Number	EP TOX	
		Result	D.L
		-----mg/kg (ppm)-----	
Arsenic	7060	ND	0.02
Barium	7080	0.7	0.5
Cadmium	7130	ND	0.1
Chromium	7160	ND	0.3
Lead	7420	ND	1
Mercury	7471	ND	0.05
Selenium	7740	ND	0.02
Silver	7760	ND	0.2
Nickel	7520	ND	0.6

Compound	EPA Number	TTLC	
		Result	D.L
		-----mg/kg (ppm)-----	
Arsenic	7060	3.3	2
Barium	7080	86.4	1
Cadmium	7130	30.6	1
Chromium	7160	70.6	3
Lead	7420	1270	7
Mercury	7471	ND	0.009
Selenium	7740	ND	0.2
Silver	7760	5.0	2
Nickel	7520	31.0	6

ND - Not Detected
D.L. Detection Limit



2860 WALNUT AVENUE
LONG BEACH, CALIFORNIA 90806
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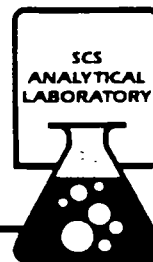
Addendum Report, RCRA Metals
Page 4 of 7

Sample I.D.: Composite CS-3
Date Received: 6/17/89
Date Analyzed: 6/30/89
Matrix: Soil
Project: 0288049.04
File #: mariot1.rep

Compound	EPA Number	EP TOX	
		Result	D.L
		-----mg/kg (ppm)-----	
Arsenic	7060	ND	0.02
Barium	7080	0.94	0.5
Cadmium	7130	ND	0.1
Chromium	7160	ND	0.3
Lead	7420	ND	1
Mercury	7471	ND	0.05
Selenium	7740	ND	0.02
Silver	7760	ND	0.2
Nickel	7520	ND	0.6

Compound	EPA Number	TTLC	
		Result	D.L
		-----mg/kg (ppm)-----	
Arsenic	7060	2.1	2
Barium	7080	68.6	1
Cadmium	7130	34.9	1
Chromium	7160	64.4	3
Lead	7420	1480	7
Mercury	7471	ND	0.009
Selenium	7740	0.24	0.2
Silver	7760	6.2	2
Nickel	7520	30.1	6

ND - Not Detected
D.L. Detection Limit



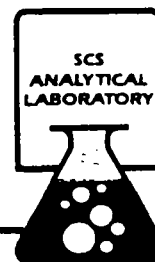
2860 WALNUT AVENUE
LONG BEACH, CALIFORNIA 90806
TEL: 595-9324
FAX: 2131 595-6709

Addendum Report, RCRA Metals
Page 5 of 7

Sample I.D.: TB1/MW1 & WS-1
Date Received: 6/17/89
Date Analyzed: 6/30/89
Matrix: Water
Project: 0288049.04
File #: mariot1.rep

Compound	EPA Number	Result -----mg/L (ppm)-----	D.L	mcv
Arsenic	7060	0.041	0.02	0.05
Barium	7080	ND	0.5	
Cadmium	7130	ND	0.005	
Chromium	7160	ND	0.1	
Lead	7420	0.062	0.005	0.015
Mercury	7471	ND	0.009	0.02
Selenium	7740	ND	0.02	
Silver	7760	ND	0.03	
Nickel	7520	ND	0.1	

ND - Not Detected
D.L. Detection Limit



2860 WALNUT AVENUE
LONG BEACH, CALIFORNIA 90806
(213) 595-9324
FAX (213) 595-6709

Addendum Report, EPA 8010
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Sample I.D.: TB3-S4 & TB3-S5
Date Received: 6/17/89
Date Analyzed: 6/30/89
Matrix: Soil
Project #: 0288049.04
File #: mariot1.rep

Compound	Result ----ug/kg (ppb)----	D.L.
Bromomethane	ND	50
Bromodichloromethane	ND	5
Bromoform	ND	5
Carbon Tetrachloride	ND	5
Chlorobenzene	ND	5
Chloroethane	ND	50
2-Chloroethylvinyl Ether	ND	50
Chloroform	ND	5
Chloromethane	ND	50
Dibromochloromethane	ND	5
1,1-Dichloroethane	ND	5
1,2-Dichloroethane	ND	5
1,1-Dichloroethene	ND	5
trans-1,2-Dichloroethene	ND	5
1,2-Dichloropropane	ND	5
cis-1,3-Dichloropropene	ND	5
trans-1,3-Dichloropropene	ND	5
Methylene Chloride	ND	50
1,1,2,2-Tetrachloroethane	ND	5
Tetrachloroethene	ND	5
1,1,1-Trichloroethane	ND	5
1,1,2-Trichloroethane	ND	5
Trichloroethene	ND	5
Trichlorofluoromethane	ND	5
Vinyl Chloride	ND	50

D.L. = Detection Limit
ND = Not Detected



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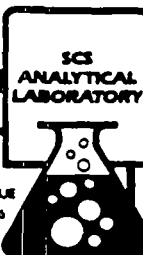
Sample I.D.: TB3-S4 & TB3-S5
Date Received: 6/17/89
Date Analyzed: 6/30/89
Matrix: Soil
Project #: 0288049.04
File #: mariot1.rep

Compound	Result	D.L.
	-----ug/kg (ppb)-----	
Benzene	65	10
Chlorobenzene	ND	10
Ethylbenzene	13	10
Toluene	64	10
Xylenes	81	10
1,2-Dichlorobenzene	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10

D.L. = Detection Limit
ND = Not Detected

CHAIN OF CUSTODY RECORD

Page 1



PERSONNEL

SITE INFORMATION

2880 WALNUT AVENUE
LONG BEACH, CALIFORNIA 90806
(213) 595-9324

Sampler (Signature) [Signature]

Phone 703-471-6150

Job Name Marriott Cleveland Airport

Job Number 028849.04

Sample Location _____

Field Crew Supervisor D. Anderson

Field Company _____

Project Geologist/Engineer C. W.

P.O. Number _____

Relinquished by (Signature) <u>[Signature]</u>	Received by (Signature) <u>[Signature]</u>	Date <u>6-17-89</u>	Time <u>3:15 PM</u>
Relinquished by (Signature)	Received by (Signature)	Date	Time

Analysis laboratory should complete "sample cond. upon receipt" section below, sign, and return copy to Shipper

Sample Number	Sample Type	No. of Cont.	Site Identification	Date Sampled	Analysis Requested	Sample Cond. Upon Receipt
TB1-S1	Soil	1	Marriott	6-15-89	SPDX Ni and Cyanide	-COOL-
TB1-S2						
TB1-S3						
TB1-S4						
TB1-S5	* add sample TB1-S6					
TB2-S1						
TB2-S2						
TB2-S3						
TB2-S4						
TB2-S5						
TB3-S1				6-16-89		
TB3-S2						
TB3-S3						
TB3-S4						
TB3-S5	↓	↓	↓	↓	↓	↓
TB1/MNI						
WF-1	Water	1	Marriott	6-16-89	dissolved Metals	↓

Remarks: 3 Soil Analysis and 1 water = 4 total Analysis

APPENDIX IV

COPY OF EPA'S REPORT, "LAKE ABRAMS HOLDING PONDS" (OHD 9801510218)

Lake Abrams Holding Ponds
OHD 980510218

The Lake Abrams Holding Ponds site is located between Engle Road and I-71 just north of Bagley Road in Middleburg Heights (Cuyahoga County). The area is a rapidly developing commercially light industrial area where many of the present structures have been built since the original 1980 site report. The 1980 E&E site investigation listed the site address as Eagle Road. The site is actually located off of Engle Road adjacent to the Bagley Road off-ramp from I-71.

~~One third of the site appears to have been filled with a considerable quantity of gritty black waste and oily waste may have been spread on the field adjacent to the ponds, according to the E&E report of 1980.~~ The report suggests that the waste may have been foundry or sewage sludge which is consistent with observations made on a recent site visit (9/28/87). No evidence of oily waste can be observed presently at the site.

The complete extent and nature of soil contamination has not been assessed at this site. The back portion of the site (see sketch) is sparsely vegetated in areas where the black waste is present. ~~The large pond appears to have extensive macrophyte growth while the smaller pond and other wet areas contain few aquatic plants.~~

Because there is no direct evidence of hazardous conditions present at the site, we recommend a low priority for F.I.T. action. The presence of the extensive downstream wetland and the large population in the area leads us to recommend a medium priority for state activity (soil or surface water sampling) coordinated with the OEPA wastewater groups. Local communities are on community water supplies for Lake Erie.

Submitted by: Dan Markowitz
Reviewed by: Rod Beals
December 3, 1987
DM:mo



**POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT**

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

246 190510218

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)

Lake Abrams Holding Ponds

02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER

Engle Rd.

03 CITY

Middleburg Heights

04 STATE

05 ZIP CODE

06 COUNTY

07 COUNTY CODE

08 CONG DIST

OH

43536

Cuyahoga

035

20

09 COORDINATES

LATITUDE

LONGITUDE

41 22 00 N

081 48 53 W

10 DIRECTIONS TO SITE (Starting from nearest public road)

No on I 71 Bayley Rd Exit. West to First Light Right (N) on Engle Rd
1/4 mi pond is on Right Enter on gravel Drive past Rosenberg Dr.

III. RESPONSIBLE PARTIES

01 OWNER (if known)

Unknown

02 STREET (Business, mailing, residential)

03 CITY

04 STATE

05 ZIP CODE

06 TELEPHONE NUMBER

07 OPERATOR (if known and different from owner)

08 STREET (Business, mailing, residential)

09 CITY

10 STATE

11 ZIP CODE

12 TELEPHONE NUMBER

13 TYPE OF OWNERSHIP (Check one)

☐ A. PRIVATE ☐ B. FEDERAL☐ C. STATE☐ D. COUNTY☐ E. MUNICIPAL☐ F. OTHER:

(Specify)

☒ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A. RCRA 3001 DATE RECEIVED: MONTH DAY YEAR☐ B. UNCONTROLLED WASTE SITE (RCRA 105) DATE RECEIVED: MONTH DAY YEAR☒ C. NONE**IV. CHARACTERIZATION OF POTENTIAL HAZARD**

01 ON SITE INSPECTION

☒ YES ☐ NODATE 10.8.80
MONTH DAY YEAR

BY (Check all that apply)

☐ A. EPA☐ B. EPA CONTRACTOR☐ C. STATE☐ D. OTHER CONTRACTOR☐ E. LOCAL HEALTH OFFICIAL☐ F. OTHER:

CONTRACTOR NAME(S): Ecology and Environment (Specify)

02 SITE STATUS (Check one)

☐ A. ACTIVE ☐ B. INACTIVE ☒ C. UNKNOWN

03 YEARS OF OPERATION

BEGINNING YEAR

ENDING YEAR

☒ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Waste Oil, Foundry Waste

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Physical Description and Part 3 - Description of Hazardous Conditions and Incidents)

☐ A. HIGH

(Inspection required promptly)

☐ B. MEDIUM

(Inspection required)

☐ C. LOW

(Inspection on low priority basis)

☐ D. NONE

(No further action needed, complete current inspection form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT

Rod Beals

02 OF (Agency/Organization)

OEPA NEDO

03 TELEPHONE NUMBER

121614254171

04 PERSON RESPONSIBLE FOR ASSESSMENT

PAN M. LOVISTZ

05 AGENCY

OEPA

06 ORGANIZATION

NEDO

07 TELEPHONE NUMBER

121614254171

08 DATE

09.24.87
MONTH DAY YEAR



☐ I. HIGHLY VOLATILE
☐ J. EXPLOSIVE
☐ K. REACTIVE
☐ L. INCOMPATIBLE
☐ M. NOT APPLICABLE



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
OHIO 980510218

1. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: 0

02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

Local Groundwater is not used for domestic or industrial use. Soil permeability is reported to be low for the area which might cause contaminants to be retained on site. This site is located over a buried ^{fill of limited sand and gravel} deposit.

01 ☒ B. SURFACE WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: 0

02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

Surface water is not used within a 3 mile radius. Site drains through surface ditches leading to an extensive wetland area adjacent to Lake Abrams.

01 ☐ C. CONTAMINATION OF AIR

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☐ E. DIRECT CONTACT

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☒ F. CONTAMINATION OF SOIL

03 AREA POTENTIALLY AFFECTED: ~5 acres

02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

A large quantity of gritty black waste is present in the soil. If this waste is contaminated with hazardous materials then on-site soils are contaminated. Potential for erosion is high because vegetation is poor.

01 ☐ G. DRINKING WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☐ H. WORKER EXPOSURE/INJURY

03 WORKERS POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

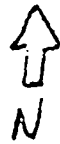
04 NARRATIVE DESCRIPTION

01 ☐ I. POPULATION EXPOSURE/INJURY

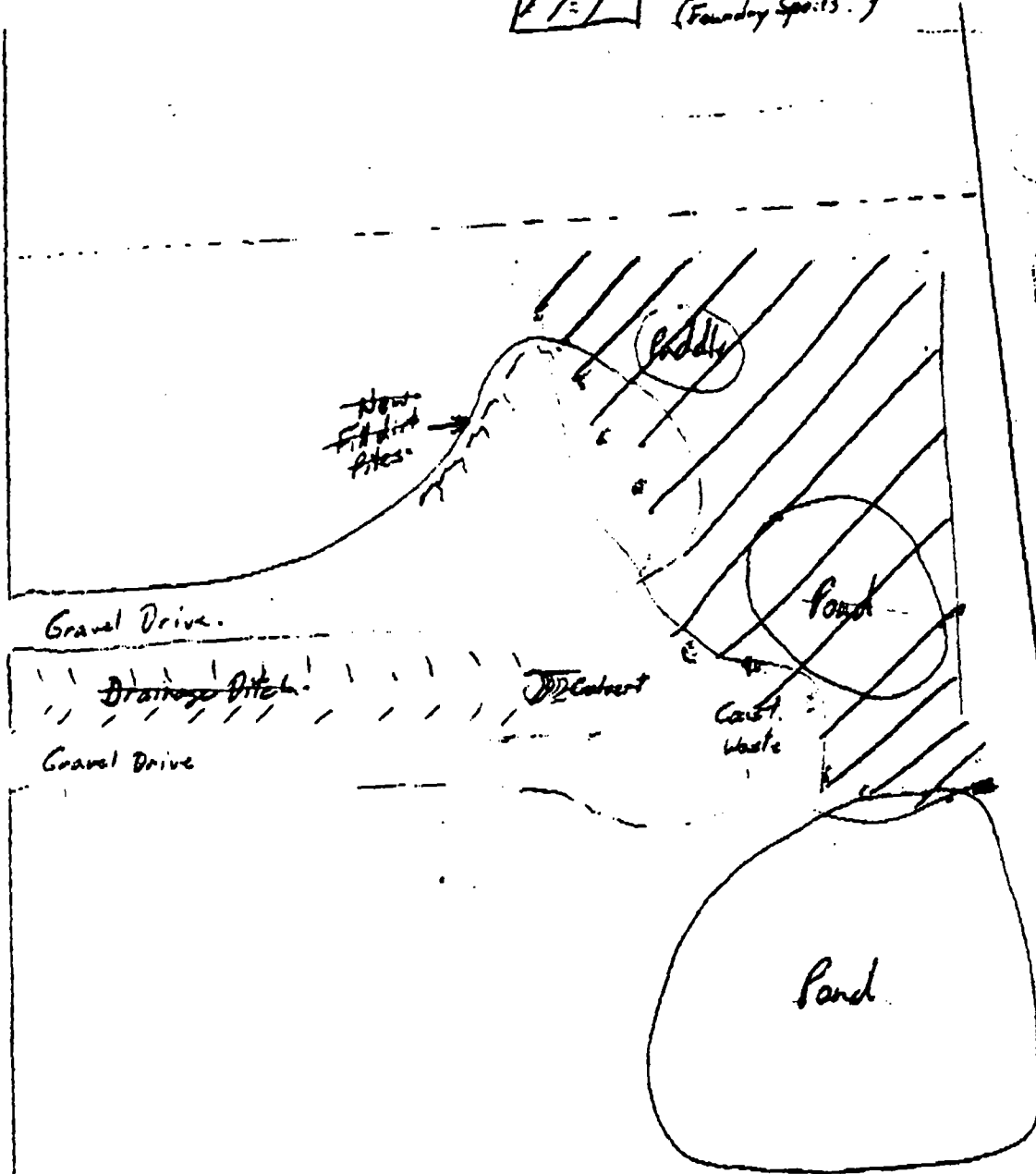
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION



Area containing
Black Sandy Waste
(Foundry Spoils?)



ENGLE Rd

I-71 Right of Way

Adjacent
Building